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09/942,045	08/30/2001	Jan Dietrich	085449-0112	7698

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EXAMINER

SHEWAREGED, BETELHEM

ART UNIT PAPER NUMBER

1774

DATE MAILED: 11/18/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/942,045

Applicant(s)

DIETRICH ET AL.

Examiner

Betelhem Shewareged

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-22 is/are pending in the application.
- 4a) Of the above claim(s) 16-22 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-15 is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_. 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. Applicant's response filed on 08/28/2003 has been fully considered. Claims 1, 10, 12 and 15 are amended, claim 4 is cancelled, claims 21 and 22 are added, and thus claims 1-3 and 5-21 are pending. (NOTE: Claims 16-22 are withdrawn from consideration as non-elected claims).

### ***Election/Restrictions***

2. Since new claims 21 and 22 are directed to a method of transferring or applying an image, the claims are classified under the non-elected Group III, therefore, the claims are withdrawn from consideration.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-3 and 5-11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In claim 1, the specification fails to provide a support for polyamides that are one of lauryllactum polymers, caprolactum polymers, and combination thereof. The specification recites orgasol® as the polyamide.

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Orgasol® is a polymer of lauryllactum, a polymer of caprolactum or a copolymer of lauryllactum and caprolactum. However, the polyamide in claim 1 is not limited to Orgasol® polyamide, it may also include other types of polyamides that are one of lauryllactum polymers, caprolactum polymers, and combination thereof, for example, poly( $\epsilon$ -caprolactom) and  $\epsilon$ -aminocaprolactam. Therefore, claim 1 contains new subject matter. For the purposes of examination, the type of claimed polyamide is not limited to a polymer of lauryllactum, a polymer of caprolactum or a copolymer of lauryllactum and caprolactum.

***Claim Rejections - 35 USC § 102***

5. Claims 1-3 and 5-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Kronzer et al. (US 5,242,739).

Kronzer discloses an image receptive heat transfer paper comprising a flexible cellulosic non-woven web base sheet and an image receptive melt transfer film layer over the base sheet, wherein the image receptive melt transfer film layer comprises a binder and a powdered polymer, wherein the amount of the binder is 15-80% by weight and the amount of the powdered polymer is 85-20% by weight (col. 3, lines 53-68). The image receptive melt transfer film layer is equivalent to the claimed at least one melt transfer ink absorption layer. The binder can be ethylene-acrylic acid copolymer (col. 6, line 29). The powdered polymer can be polyamide (col. 14, line 4) and it has a particle diameter of 2-50 micrometer (col. 6, line 7), wherein the particle diameter is within the claimed particle size range. The binder melts in the range of 65 to 180 °C (col. 6, line

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5), which overlaps with the claimed melting range. The calculated weight ratio of binder to powdered polymer is 1:0.25 to 1:5.66, which overlaps with the claimed weight ratio of matrix material to filler. The calculation is done as follow: 15% by weight of binder/85% by weight of powdered polymer = 1:5.66, and 80% by weight of binder/20% by weight of powdered polymer = 1:0.25. The thickness of the image receptive film layer is 12 to 80 micrometer, which overlaps with the claimed thickness (col. 6, line 10). The image receptive melt transfer film layer can be separated into a melt transfer film layer and an image receptive film layer, and in this instance the melt transfer film layer is disposed between the base sheet and the image receptive film layer (col. 7, line 9). The image receptive film layer and the melt transfer film layer are equivalent to the claimed melt transfer ink absorption layer comprising a plurality of layers as recited in claim 8. The melt transfer film layer comprises a binder (col. 4, line 7). Since the melt transfer film layer is missing the powdered polymer, there is a concentration gradient of the powdered polymer in the image receptive melt transfer film layer as recited in claim 9.

6. Claims 1-3 and 5-11 are rejected under 35 U.S.C. 102(a) as being anticipated by Hare et al. (US 6,087,061) as evidenced by Kronzer et al. (US 5,242,739).

Hare discloses a hot peel transfer for dry release and adhesion, comprising a polyethylene terephthalate (PET) support and a transfer material coated on the support (col. 4, line 8 and col. 8, lines 55-61). Hare further discloses the transfer material of Kronzer et al. (US 5,242,739) as a suitable transfer material to be applied on the support. The transfer material of Kronzer is disclosed above in paragraph 4. The PET

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is equivalent to the claimed polyester backing material because PET is known as a polyester material. Since the support material of Hare and the claimed backing material are substantially identical, the heat resistance of the support of Hare would inherently be equivalent to the claimed heat resistance as in claim 11.

### ***Response to Arguments***

7. Applicant's argument is based on that the prior arts do not expressly disclose that their transfer medium is receptive to ink jet ink. This argument is not persuasive because the prior arts teach all of Applicant's claimed compositional and positional limitations. (See paragraphs 5 and 6 above).

Applicant further argues that the prior arts fail to disclose any of the same materials for filler as compared to those recited in claim 1. This argument is not persuasive because the prior arts disclose at least one of the claimed materials for the filler, that is the polyamide (see paragraph 4 above).

For the above reasons claims 1-3 and 5-11 stand rejected.

### ***Allowable Subject Matter***

8. Claims 12-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Neither Kronzer nor Hare teach or suggest a transfer system having a backing material with a rough release surface and a non-meltable dulling material or layer as recited in claims 12-15.

***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Betelhem Shewareged whose telephone number is 703-305-0389. The examiner can normally be reached on Mon.-Thur. 7:30AM-6:00PM.

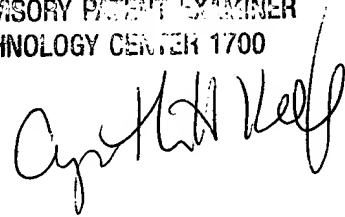
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H Kelly can be reached on 703-308-0449. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

BS *B.S*  
November 17, 2003.

CYNTHIA H. KELLY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700

A handwritten signature in black ink, appearing to read "Cynthia H. Kelly", written over the printed name and title.